**Morrow Designs – History**

(From www.s100computers.com)



George Morrow was the founder of Morrow's Micro Stuff & Morrow Designs but unlike some other S-100 computer companies his path was a bit more indirect. In the mid 1970's he was a graduate student in mathematics at Berkley and  became interested in microcomputers and with two of his friends, Chuck Grant and Mark Greenberg. They toyed with the idea of making S-100 boards for the then new Altair computer. I guess they could not decide exactly what to do because the three split up. Grant and Goldberg went on to form [NorthStar](http://www.s100computers.com/Hardware%20Folder/Northstar/History/History.htm) Computers in Berkley.

George got the idea of making a keyboard driven front panel board for 8080 driven Altair and IMASI computers. Unfortunately it was not a big hit because it used Octal addressing (everybody after Altair went with Hex addressing) and also because there was a rush toward z80 based systems.

After trying a few other things he worked on a low cost 4K memory board and sold it to Bill [Godbout](http://www.s100computers.com/Hardware%20Folder/CompuPro/History/History.htm). The board was quit reliable and popular. It was far better than the equivalent Altair 4K dynamic RAM boards from [MITS](http://www.s100computers.com/Hardware%20Folder/MITS/History/History.htm).  It sold well.



George then decided to actually start his own company which he called *Thinker Toys* initially but later changed it to *Morrow's Micro Stuff*, to sell his boards. It was a time of rapid expansion in the fledging microcomputer industry. The demand for cheap memory boards was almost impossible to fill.  Companies like Morrows Micro Stuff could not make boards fast enough. In 1977, George got side tracked when  he joined up with a guy called Howard Fulmer (later VP of R&D at Morrow Designs) and they put together an S-100 computer which they called the Equinox-100. Unfortunately it was 8080 based.  The 8 bit world was moving rapidly towards the Z80. The system never really took off.

Not to be stopped he then focused on an S-100 floppy disk controller board complete with an 8" disk drive, cabinet , cables and most importantly CP/M software. Again he was at the right place at the right time. It brought a very reasonable priced 8" floppy disk system to the hobbyist. It was a great success and allowed him to build the company.

He returned to putting together a complete computer systems and  sold them as a package with a video terminal. His company, Morrow's Micro Decisions, made a single circuit board computer with 64K of RAM board, two serial ports, a parallel port  and either one or two floppy disks. The video terminal was made by a terminal manufacturer. The system was sold with CP/M, two versions of BASIC, and an applications package that  including WordStar, a spreadsheet, and a financial analysis package. It looked like an IBM-PC on the outside.

However when the IBM-PC with its 16 bit system got going things started to change. Morrow actually made a MS-DOS 16 bit system called the "Pivot". He had high hopes for the system. However he lost out on a large US government (IRS) bid to Zenith Corp for large volumes of the unit. The company never could completely recover. The company actually had a number of names over time. It was called "Morrows MicroStuff" "Thinker Toys", "Morrow Designs", "Discus" and Morrow Micro Designs".

George himself was one of the legendry hero's of the S-100 era. He was an active member of many user groups and probably was the person most responsible for the design, specification and approval of the IEEE-696 standard. He was well known for his enthusiasm and his sense of humor within the computer industry.

One interesting story -- In his early years, he was arrested for stealing hubcaps and the judge gave him the choice - jail or the Army, he choose the Army and while in the Army he opened up a store off base selling used power supplies (illegal) - but that is how he got his start!  Unfortunately George passed away in May 2003. A sad loss to us all.